

AMENDMENTS TO THE CLAIMS

1. (Amended.) A product ~~comprising~~ consisting essentially of a disassociated CCH-A subunit isolated from hemocyanin of the marine gastropod *Concholepas concholepas*, wherein the CCH-A subunit has a molecular weight of about 404 kDa, and is stable in the absence of Ca^{+2} and Mg^{+2} ~~and is at least 95% pure.~~
2. (Amended.) The use of the product according to claim 1 as an immunostimulant agent in the innate or adaptive ~~vertebrates~~ response of vertebrates, by administering to the invertebrates an immunogen-enhancing amount of the product or as an immunotherapeutic agent in cancer or tumors of either humans or animals, by administering to the humans or animals an immunotherapeutic-enhancing amount of the product.
3. (Amended.) A composition comprising:
 - a. a product ~~comprising~~ consisting essentially of a disassociated CCH-A subunit isolated from hemocyanin of the marine gastropod *Concholepas concholepas*, wherein the CCH-A subunit has a molecular weight of about 404 kDa, is stable in the absence of Ca^{+2} and Mg^{+2} ~~and is at least 95% pure~~, and
 - b. a physiologically acceptable isotonic buffer.
4. (Amended.) The composition according to claim 3, wherein the composition further comprises an other protein, an LPS, a polysaccharide, or an other hemocyanin or a subunit thereof, wherein the CCH-A subunit is at least 95% pure.
5. (Original.) The composition according to claim 4, wherein the other hemocyanin comprises a CCH-B subunit.
6. (Original.) A method for treating a disease state selected from bladder cancer, melanoma, mammary cancer or ovary cancer, comprising the step of administering to a patient with the disease state an effective anti-tumor amount of a composition comprising:

a. a product comprising a CCH-A subunit isolated from hemocyanin of the marine gastropod *Concholepas concholepas*, wherein the CCH-A subunit has a molecular weight of about 404 kDa, is stable in the absence of Ca^{+2} and Mg^{+2} and is at least 95% pure, and

b. a physiologically acceptable isotonic buffer.

7. (Amended.) A method according to Claim 6 wherein the composition further comprises an other protein, an LPS, a polysaccharide, or ~~an other~~ another hemocyanin or a subunit thereof.

8. (Original.) The method according to Claim 7 wherein the other hemocyanin comprises a CCH-B subunit.

9. (Original.) The method according to Claim 6, wherein the composition comprises a concentration of CCH-A subunit from about 0.1 mg/ml to 20 mg/ml.

10. (Original.) The method according to Claim 9, wherein the concentration of CCH-A subunit is from about 2 to 10 mg/ml.

11. (Original.) The method according to Claim 10, wherein the concentration of CCH-A subunit is 5 mg/ml.

12. (Original.) The method of Claim 8, wherein the CCH-A subunit forms a heterodimer with the CCH-B subunit.

13. (Amended.) A method for enhancing the immunogenicity of a hapten or a peptide, comprising the step of ~~administering~~ administering with the hapten or the peptide an amount of a product comprising a CCH-A subunit isolated from hemocyanin of the marine gastropod *Concholepas concholepas*, wherein the CCH-A subunit has a molecular weight of about 404 kDa, is stable in the absence of Ca^{+2} and Mg^{+2} , and is at least 95% pure, and wherein the product is an immunogen.

14. (Original.) The method according to claim 13, wherein the CCH-A subunit is a carrier for the hapten or peptide.

15. (Original.) The method according to claim 13, wherein the CCH-A subunit is an adjuvant.
16. (Original.) The method according to claim 13, wherein the CCH-A subunit is linked to the hapten or peptide.
17. (Original.) The method according to Claim 13, further comprising the step of administering another protein.
18. (Original.) The method according to Claim 14, further comprising the step of administering another protein.
19. (Original.) The method according to Claim 13, wherein the product further comprises a CCH-B subunit.
20. (Original.) The method according to Claim 19 wherein the CCH-A subunit forms a heterodimer with the CCH-B subunit.